



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2020-1069; Project Identifier 2018-CE-039-AD; Amendment 39-21854; AD 2021-25-10]

RIN 2120-AA64

Airworthiness Directives; Daher Aerospace (Type Certificate Previously Held by SOCATA) Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Daher Aerospace (type certificate previously held by SOCATA) (Daher) Model TBM 700 airplanes. This AD results from mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The unsafe condition that is the subject of the MCAI is ice accumulation on the oil cooler air inlet duct fin. This AD requires modifying the oil cooler air induction duct. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact Daher Aerospace Inc., Pompano Beach Airpark, 601 NE 10 Street, Pompano Beach, FL 33060; phone: (954) 893-1400; website: <https://www.tbm.aero>. You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at

the FAA, call (817) 222-5110. It is also available at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-1069.

Examining the AD Docket

You may examine the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-1069; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the MCAI, any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Greg Johnson, Aviation Safety Engineer, FAA, General Aviation & Rotorcraft Section, International Validation Branch, 901 Locust, Room 301, Kansas City, MO 64106; phone: (720) 626-5462; fax: (816) 329-4090; email: greg.johnson@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to Daher Model TBM 700 airplanes with certain oil cooler air induction ducts installed. The NPRM published in the *Federal Register* on August 18, 2021 (86 FR 46160). The NPRM was based on MCAI from the European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union. EASA issued AD 2018-0133, dated June 22, 2018, and corrected June 25, 2018 (referred to after this as “the MCAI”), to address the unsafe condition on certain Daher Model TBM 700 airplanes. The MCAI states:

During flight testing in icing conditions, oil temperature increase was observed. Subsequent investigation determined that the loss of efficiency of the oil cooler system was due to ice accumulation on the engine air induction duct fins.

This condition, if not corrected, could lead to uncommanded engine in-flight shut-down and reduced control of the aeroplane.

To address this potential unsafe condition, DAHER AEROSPACE developed MOD 70-0616-79 for aeroplanes in production, removing the 4 upper fins of the oil cooler air induction duct to avoid ice accumulation, available for in-service aeroplanes through the SB [Daher Aerospace Service Bulletin 70-254, dated April 18, 2018].

For the reasons described above, this [EASA] AD requires modification of the oil cooler air induction duct.

You may examine the MCAI in the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-1069.

Although the unsafe condition statement in the MCAI identifies the cause as ice accumulation on the engine air induction fin, the FAA has determined that this does not accurately identify the affected air path. The affected area is the oil cooler air inlet duct fin.

In the NPRM, the FAA proposed to require modifying the oil cooler air induction duct. The FAA is issuing this AD to prevent ice from accumulating on the oil cooler air induction duct fins, which could lead to an increase in oil temperature, uncommanded engine inflight shutdown, and reduced airplane control.

Discussion of Final Airworthiness Directive

Comments

The FAA received no comments on the NPRM or on the determination of the costs.

Conclusion

This product has been approved by the aviation authority of another country and is approved for operation in the United States. Pursuant to the FAA's bilateral agreement with this State of Design Authority, it has notified the FAA of the unsafe condition described in the MCAI referenced above. The FAA reviewed the relevant data and determined that air safety requires adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on these products. This AD is adopted as proposed in the NPRM.

Related Service Information under 1 CFR Part 51

The FAA reviewed Daher Aerospace Service Bulletin SB 70-254, dated April 2018. The service information specifies procedures for removing the four upper fins of

the oil cooler air induction duct and for re-identifying the oil cooler air induction duct with a new part number. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Other Related Service Information

The FAA also reviewed Daher Aerospace Service Bulletin SB 70-231, Revision 1, dated July 2018; and Daher Aerospace Service Bulletin SB 70-219, Revision 2, dated July 2018. The service information identifies the kit number and installation procedures for replacing the oil cooler air induction duct.

Costs of Compliance

The FAA estimates that this AD will affect up to 807 airplanes of U.S. registry. The FAA also estimates that it would take about 3 work-hours per airplane to comply with the requirements of this AD. The average labor rate is \$85 per work-hour. Required parts will cost about \$50 per airplane.

Based on these figures, the FAA estimates the total cost of this AD on U.S. operators to be \$246,135 or \$305 per airplane.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

- 2. The FAA amends § 39.13 by adding the following new airworthiness directive:

2021-25-10 Daher Aerospace (Type Certificate Previously Held by SOCATA):

Amendment 39-21854; Docket No. FAA-2020-1069; Project Identifier 2018-CE-039-AD.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Daher Aerospace (type certificate previously held by SOCATA) Model TBM 700 airplanes, all serial numbers, certificated in any category, with an oil cooler air induction duct part number (P/N) T700A7920040001, T700H792000900000, T700H792001900000, T700H792001900200, T700H792001900400, or T700H792001900600 installed.

Note 1 to paragraph (c) of this AD: The applicable oil cooler air induction duct P/Ns may be installed in accordance with modification 70-0435-79; Daher Aerospace Service Bulletin SB 70-231, Revision 1, dated July 2018; or Daher Aerospace Service Bulletin SB 70-219, Revision 2, dated July 18, 2018.

(d) Subject

Joint Aircraft System Component (JASC) Code 7900, Engine Oil System (Airframe).

(e) Unsafe Condition

This AD was prompted by mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The unsafe condition that is the subject of the MCAI is ice accumulation on the oil cooler air inlet duct fin. The FAA is issuing this AD to prevent ice from accumulating on the oil cooler air induction duct fins, which could lead to an increase in oil temperature, uncommanded engine inflight shutdown, and reduced airplane control.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Modify the oil cooler air induction duct

(1) Within 3 months after the effective date of this AD, remove the four upper fins of the oil cooler air induction duct and re-identify the oil cooler air induction duct in accordance with the Description of Accomplishment Instructions in Daher Aerospace Service Bulletin SB 70-254, dated April 2018.

(2) As of the effective date of this AD, do not install an oil cooler air induction duct P/N T700A7920040001, T700H792000900000, T700H792001900000, T700H792001900200, T700H792001900400, or T700H792001900600 on any airplane.

(h) Alternative Methods of Compliance (AMOCs)

(1) The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (i)(1) of this AD and email to: 9-AVS-AIR-730-AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(i) Related Information

(1) For more information about this AD, contact Greg Johnson, Aviation Safety Engineer, FAA, General Aviation & Rotorcraft Section, International Validation Branch, 901 Locust, Room 301, Kansas City, MO 64106; phone: (720) 626-5462; fax: (816) 329-4090; email: greg.johnson@faa.gov.

(2) Refer to European Aviation Safety Agency (EASA) AD 2018-0133, dated June 22, 2018, and corrected June 25, 2018, for more information. You may examine the EASA AD in the AD docket at <https://www.regulations.gov> by searching for and locating it in Docket No. FAA-2020-1069.

(j) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Daher Aerospace Service Bulletin SB 70-254, dated April 2018.

(ii) [Reserved]

(3) For Daher Aerospace service information identified in this AD, contact Daher Aerospace Inc., Pompano Beach Airpark, 601 NE 10 Street, Pompano Beach, FL 33060; phone: (954) 893-1400; website: <https://www.tbm.aero>.

(4) You may view this referenced service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at the FAA, call (817) 222-5110.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email: fr.inspection@nara.gov, or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on December 3, 2021.

Lance T. Gant, Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

[FR Doc. 2021-27408 Filed: 12/17/2021 8:45 am; Publication Date: 12/20/2021]